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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,736	06/05/2000	Yezdi Dordi	4256	7891

32588 7590 01/04/2006  
APPLIED MATERIALS, INC.  
2881 SCOTT BLVD. M/S 2061  
SANTA CLARA, CA 95050

EXAMINER

LEADER, WILLIAM T

ART UNIT PAPER NUMBER

1742

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/586,736

Applicant(s)

DORDI, YEZDI

Examiner

William T. Leader

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-32, 34, 36-39, 42 and 56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-32, 34, 36-39, 42 and 56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. As indicated in the communication mailed on July 15, 2005, the notice of abandonment has been withdrawn.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 24, 2004, has been entered.
3. The amendment after filed on October 26, 2004, has been entered. Claims 30-32, 34, 36-39, 42 and 56 are pending.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 30-32, 34, 36-39, 42 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Woodruff et al (6,497,801).

6. The Woodruff et al patent is directed to an electrolytic cell. The cell includes a vessel 12 with a plurality of concentric anode segments 30, 32, 34 and 36. The anode segments are mounted on anode support 40 which is mounted above the base of vessel 12. The apparatus may include a control arrangement operatively connected to the anode array for independently operating the plurality of anode segments, which permits the segments to be operated at different electrical potentials (column 3, lines 16-20). Dielectric elements 46 may be placed between adjacent ones of the anode segments (column 5, lines 44-50. As shown in figure 5, the dielectric elements contact both anode segments between which they are located. Figures 6-9 illustrate a second embodiment in which insulating divider elements 141 are placed between anode segments 130, 132, 134, 136 and 138. In both embodiments the anode segments have coplanar upper and lower surfaces. All elements of claims 30-32 and 34 are met by the first two embodiments of Woodruff et al.

7. In figures 10-13 a third embodiment is shown. In this embodiment, the anode array is configured to permit flow of electroplating solution between adjacent ones of the anode segments (column 7, lines 16-19. Base 240 includes a plurality of flow passages 245 arranged in a pattern of concentric circles. Figure 13 shows an insulating member with an opening through which the solution flows contacting both anode segments between which it is located. All elements of claims 36-39, 42 and 50 are met by the third embodiment of Woodruff et al.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 36-39, 42 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodruff et al (6,497,801) in view of Reed (4,828,654).

10. Woodruff et al is taken as above. From the teaching of Woodruff et al that each anode segment may be operated at a different electrical potential, it is clear that the anode support must be made of an insulating material to prevent the anodes from electrically shorting, even if this is not explicitly stated. As indicated in the previous office action, Reed teaches that supports 36 on which a plurality of anode segments are mounted are preferably formed of plastic to achieve an electrical insulating effect between the anode segments (column 4, lines 16-20). It would have been obvious at the time the invention was made to have made the anode support and dividers between anode segments in Woodruff et al of an insulating material as taught by Reed to have provided electrical insulating effect between the anode segments.

11. Claims 30-32, 34, 36-39, 42 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,391,116) in view of Reed (4,828,654) or Bhatt et al (5,156,730) and further in view of Inoue (5,244,550).

12. Wang, Reed and Bhatt are taken as in the previous office action. Applicant has amended the claims to recite that an insulating members between the adjacent segments contact the


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adjacent anode segments. Inoue et al is directed to an electrolytic cell with concentric electrodes and shows holders/insulators 4 positioned between electrode segments. It would have been obvious at the time the invention was made to have insulating holders between the anode segments suggested by Wang in view of Reed and Bhatt et al because the electrodes would have been better supported as taught Inoue et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William T. Leader whose telephone number is 571-272-1245. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William Leader  
December 21, 2005

  
ROY KING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700